

WEATHER OF NORTH AMERICA AND ADJACENT OCEANS.

NORTH ATLANTIC OCEAN.

By F. A. YOUNG.

The average pressure for the month was somewhat lower than usual at land stations in Newfoundland and on the American coast, north of Hatteras. It was slightly above the normal in the West Indies and Gulf of Mexico, while in the Azores and on the coast of Great Britain the positive departures were quite large.

Fog was unusually prevalent on the Grand Banks and off the New England coast, and was also observed on three days in the Gulf of Mexico, while the eastern section of the steamer lanes was comparatively free.

Taking the ocean as a whole, the number of days on which winds of gale force were observed, was not as great as in December, although considerably above the normal for January. In the southwestern section of the ocean there was comparatively little difference between the two months, although in the eastern part of the steamer lanes the number for the month under discussion was slightly less than usual.

A large number of casualties was reported, and during the last two decades of the month, unusual unfavorable conditions prevailed over the region between the Azores and Bermudas.

On the 1st there was a fairly well developed disturbance in mid-ocean that moved rapidly eastward, as on the 3d it was in the vicinity of the North Sea, and a number of vessels in the eastern section of the steamer lanes reported strong gales, as shown by following storm logs:

British S. S. Manchester Spinner:

Gale began on December 31, wind SW., 6. Lowest barometer 29.43 inches at 3:30 p. m. on the 2d, wind W., in latitude 50° 32' N., longitude 22° 07' W. End on the 2d, wind WNW. Highest force of wind 12; shifts 2 points.

British S. S. Manchester Merchant:

Gale began on the 1st, wind SW. Lowest barometer 29.05 inches at noon on the 1st, wind SW., 9, in latitude 51° 33' N., longitude 33° 41' W. End on the 2d, wind NW. Highest force of wind 12; shifts WSW.-NW.

On the 1st Cape Hatteras was the center of a second area of low pressure, that moved rapidly northeastward and on the following day was over the western part of Newfoundland. Storm logs:

French S. S. Rochambeau:

Gale began on the 1st, wind S. Lowest barometer 29.61 inches on the 1st, wind SSW., 11, in latitude 41° N., longitude 64° 35' W. End on the 1st, wind WNW. Highest force of wind 11, SSW.: shifts SSW.-WNW.

American S. S. Lake Gilboa:

Gale began on December 31, wind SSE. Lowest barometer 29.70 inches on the 1st, wind S., 10, in latitude 35° 12' N., longitude 75° 18' W. End on the 1st. Highest force of wind 10, S.: shifts SSE.-S.

Dutch S. S. Leersum:

Gale began on the 1st, wind SSW. Lowest barometer 29.76 inches at 2:30 a. m. on the 2d, wind N., 10, in latitude 40° 33' N., longitude 61° 45' W. End on the 2d. Highest force of wind 11; shifts SSW.-W.-WNW.

On the 5th moderate gales were reported by vessels off the European coast and on the 6th a disturbance of limited extent was central near latitude 45° N., longitude 35° W. Its easterly movement was fairly rapid, as on the 8th the center was about 5° west of the Irish coast. From the 8th to the 10th the rate of translation lessened, as on the latter date it was central over the north of Scotland, and strong westerly to northwesterly gales accompanied by rain, hail, and snow were prevalent over

the region between the 30th meridian and European coast. Storm logs follow:

American S. S. Wildwood:

Gale began on the 5th, wind S. Lowest barometer 29.71 inches at 4 p. m. on the 6th, wind SW., 7, in latitude 44° 45' N., longitude 37° W. End on the 7th, wind NW. Highest force of wind 10; shifts SSW.-NE. and backing to NW.

British S. S. Kenbane Head:

Gale began on the 7th, wind WSW. Lowest barometer 29.19 inches at 10 p. m. on the 8th, wind WSW., 10, in latitude 54° 46' N., longitude 16° 40' W. End on the 10th, wind NW. Highest force of wind 10, W., shifts WSW.-NW.

American S. S. Monmouth:

Gale began on the 9th, wind NW. Lowest barometer 30.01 inches at 2 a. m. on the 9th, wind NW., 9, in latitude 50° 20' N., longitude 13° 15' W. End on the 10th, wind NW. Highest force of wind 10; steady NW.

British S. S. Ballygally Head:

Gale began on the 8th, wind S. Lowest barometer 28.15 inches at 5 p. m. on the 9th, wind WNW., 9, in latitude 58° 30' N., longitude 16° 40' W. End on the 10th, wind NW. Highest force of wind 11, SSW.; shifts S.-N. by W. 17 points, then NW.

On the 9th Halifax, N. S., was near the center of a moderate disturbance that increased in intensity as it traveled slowly in an east-northeasterly direction, and on the 10th and 11th southerly to westerly gales were reported from the region between the 30th and 40th parallels and 55th and 70th meridians. Storm logs follow:

British S. S. Comanche:

Gale began on the 8th, wind W. Lowest barometer 29.37 inches at 4 a. m. on the 10th, wind W., 7, in latitude 37° 23' N., longitude 67° 16' W. End on the 11th, wind N. Highest force of wind 10; shifts W.-NW.

American S. S. City of Freeport:

Gale began on the 10th, wind SSW. Lowest barometer 29.58 inches at 8 a. m. on the 11th, wind S., 8, in latitude 37° 11' N., longitude 58° 20' W. End on the 11th, wind WNW. Highest force of wind 9; shifts S.-WNW.

On the 12th New York was surrounded by an area of moderate low pressure that afterwards developed into one of the worst storms of the month; increasing in intensity, and moving but slightly, the storm area on the 13th and 14th extended as far south as the 30th parallel. Charts VIII to X show the conditions from the 13th to 15th, inclusive. Storm logs follow:

American schooner Frank A. Morey:

Gale began on the 11th, wind SSW. Lowest barometer 29.89 inches at 4 a. m. on the 12th, wind SW., in latitude 35° N., longitude 75° 25' W. End on the 12th, wind WSW. Highest force of wind 9; shifts SSW.-WSW.

British S. S. San Bruno:

Gale began on the 12th, wind SW. Lowest barometer 29.93 inches at noon on the 12th, wind SW., in latitude 33° N., longitude 71° 42' W. End on the 14th, wind N. Highest force of wind 10; shifts SW.-WNW.

American S. S. Effna:

Gale began on the 13th, wind SW. Lowest barometer 29.62 inches on the 13th, wind W., in latitude 33° 54' N., longitude 60° 53' W. End on the 14th, wind NW. Highest force of wind 9; steady W.

British S. S. Henry Deutsch de la Meurthe:

Gale began on the 12th, wind S. Lowest barometer 29.39 inches at 10 p. m. on the 12th, wind S., 8, in latitude 39° 20' N., longitude 57° 35' W. End on the 13th, wind NW. Highest force of wind 10; shifts S.-SW.-NW.

German S. S. Bayern:

Gale began on the 13th, wind SSE. Lowest barometer 29.18 inches at 5 a. m. on the 14th, wind WSW., 12, in latitude 42° 4' N., longitude 45° 50' W. End on the 16th, wind NNE. Highest force of wind 12, WSW.; shifts SSE.-WSW.-WNW.

Italian S. S. *Giuseppe Verdi*:

Gale began on the 14th, wind S. Lowest barometer 29.34 inches at noon on the 14th, wind S., 8, in latitude 37° N., longitude 44° 22' W. End on the 18th, wind NNE. Highest force of wind 10; shifts not given.

American S. S. *W. H. Tilford*:

Gale began on the 13th, wind SSW. Lowest barometer 29.59 inches at 10 p. m. on the 13th, wind WNW., in latitude 37° N., longitude 55° 48' W. End on the 16th, wind NW. Highest force of wind 10, WSW.; shifts SSW.-S.-WNW.

On the 15th there was a second disturbance central off Nantucket and from that date until the 17th heavy weather prevailed over the region between the 55th meridian and the American coast, the storm area extending as far south as the Bermudas. It was in this storm that the Italian S. S. *Montello* was lost, her ship's company being rescued by the crew of the Italian S. S. *Giuseppe Verdi* on the 16th, near latitude 37° N., longitude 57° W. Storm logs follow:

American S. S. *Harvester*:

Gale began on the 14th, wind NE. Lowest barometer 29.98 inches at 7 p. m. on the 15th, wind NW., in latitude 33° 34' N., longitude 77° 49' W. End on the 18th, wind S. Highest force of wind 9; shifts NE.-E.-S.-SW.-W.-NW.

American S. S. *Satartia*:

Gale began on the 17th, wind W. Lowest barometer 29.69 inches on the 17th, wind WNW., 8, in latitude 36° 23' N., longitude 64° 10' W. End on the 18th, wind NNW. Highest force of wind 10; shifts W.-W.-WNW.-NW.-NNW.

On the 17th and 18th northeasterly winds of gale force were encountered in the West Indies as shown by following storm log:

American S. S. *Lake Fairport*:

Gale began on the 17th, wind NE. Lowest barometer 30 inches at 4 p. m. on the 18th, wind NE., in latitude 18° 17' N., longitude 75° 39' W. End on the 18th, wind ENE. Highest force of wind 9; shifts NE.-ENE.

On the 19th and 20th favorable weather was the rule over the entire ocean except that moderate gales were reported from a limited area off the coast of Scotland.

On the 20th and 21st northerly winds of gale force, accompanied by unusually high barometric readings, were reported by vessels near latitude 40° N., longitude 45° W. Storm log follows:

British S. S. *Epsom*:

Gale began on the 20th, wind NNE. Lowest barometer 30.43 inches at 8 a. m. on the 21st, wind NNE., 8, in latitude 40° 18' N., longitude 48° W. End on the 22d, wind ENE. Highest force of wind 9; shifts NNE. to NE.

Charts XI to XIII show the conditions from the 24th to 26th, inclusive, when the greater part of the ocean was swept by gales of varying intensities. On the 25th and 26th there were two areas of low pressure; the first central off the New England coast and the second near latitude 45° N., longitude 40° W. On the 26th the western disturbance was especially violent over a limited area in the vicinity of Nantucket Shoals. Storm logs follow:

British M. S. *Dominion Miller*:

Gale began on the 23d, wind SW. Lowest barometer 29.75 inches at noon on the 23d, wind SW., 7, in latitude 43° 36' N., longitude 53° W. End on the 24th, wind N. Highest force of wind 10, N.; shifts SW.-W.-NW.-N.

British M. S. *Dominion Miller*:

Gale began on the 25th, wind N. Lowest barometer 29.25 inches at noon on the 25th, wind N., 8, in latitude 41° 14' N., longitude 64° 26' W. End on the 26th, wind N. Highest force of wind 12; shifts SE.-S.-SW.-W.

British S. S. *Verentia*:

Gale began on the 23d, wind SE. Lowest barometer 29.40 inches at 8 p. m. on the 25th, wind NW., 9, in latitude 41° 55' N., longitude 45° 54' W. End on the 26th, wind W. Highest force of wind 10, NW.; steady NW.

American S. S. *Texan*:

Gale began on the 24th, wind SE. Lowest barometer 29.31 inches at 6 p. m. on the 25th, wind 11, S., in latitude 44° 39' N., longitude 37° W. End on the 26th, wind SE. Highest force of wind 11; shifts SE.-ESE.-S.

Dutch S. S. *Bergerdijk*:

Gale began on the 25th, wind SSE. Lowest barometer 29.16 inches at 1 p. m. on the 25th, wind SSE., 8, in latitude 42° 09' N., longitude 64° 05' W. End on the 26th, wind NW. Highest force of wind 9; shifts SSE.-W.

Dutch S. S. *Amersfoort*:

Gale began on the 20th, wind ENE. Lowest barometer 29.59 inches at 5:30 a. m. on the 24th, wind SW., 2, in latitude 35° 22' N., longitude 43° 23' W. End on the 25th, wind NNW. Highest force of wind 9; shifts SSW.-NW.

French S. S. *Roma*:

Gale began on the 24th, wind SE. Lowest barometer 29.56 inches at 10 a. m. on the 25th, wind SE., 10, in latitude 38° 09' N., longitude 30° 45' W. End on the 26th, wind SW. Highest force of wind 10, SE.; steady SE.

Belgian S. S. *Sunoco*:

Gale began on the 25th, wind SE. Lowest barometer 29.46 inches at 7 a. m. on the 25th, wind SE., 9, in latitude 45° 14' N., longitude 36° 10' W. End on the 27th, wind SSE. Highest force of wind 10; shifts SSE.-ESE.

The weather conditions over the ocean, as a whole, were unfavorable during the remainder of the month, although the intensity of the gales and extent of the storm areas varied considerably from day to day. The most unusual feature was the persistent intrusion of heavy winds in the region between the Azores and Bermudas, extending below the 30th parallel. On the 30th the greater part of the ocean west of the 30th meridian was storm swept, while on the 31st moderate weather prevailed over quite an extensive area in mid-ocean. Storm logs follow:

British S. S. *Idaho*:

Gale began on the 24th, wind NW. Lowest barometer 29.01 inches at 4 a. m. on the 27th, wind WNW., in latitude 41° 12' N., longitude 52° 48' W. End on the 28th, wind N. Highest force of wind 9; shifts WNW.-NW.

British S. S. *Verbania*:

Gale began on the 26th, wind WNW. Lowest barometer 29.19 inches at noon on the 27th, wind WNW., in latitude 41° 08' N., longitude 56° 58' W. End on the 28th, wind NW. Highest force of wind 9, NNW.; steady WNW.

American S. S. *Quistconck*:

Gale began on the 29th, wind SW. Lowest barometer 29.70 inches at 10 a. m. on the 29th, wind SW., 7, in latitude 31° 56' N., longitude 49° 12' W. End on the 31st, wind NW. Highest force of wind 9, SW.; shifts SW.-WNW.

American S. S. *Schodack*:

Gale began on the 29th, wind S. Lowest barometer 28.95 inches at 2 p. m. on the 30th, wind S., 12, in latitude 44° 20' N., longitude 35° 20' W. End on the 31st, wind W. Highest force of wind 12; shifts S.-W.-SW.

British S. S. *Saint Andrew*:

Gale began on the 29th, wind SE. Lowest barometer 28.50 inches at 7 p. m. on the 30th, wind SW., 6, in latitude 49° N., longitude 38° 06' W. End on the 31st, wind WNW. Highest force of wind 10; shifts S.-W.-NW.

British S. S. *Idaho*:

Gale began on the 29th, wind NW. Lowest barometer 29.89 inches on the 29th, wind NW., in latitude 40° 37' N., longitude 65° 55' W. End on the 30th, wind NW. Highest force of wind 10; steady NW.

American S. S. *Glen Ridge*:

Gale began on the 31st, wind NNW. Lowest barometer 29.84 inches at noon on the 31st, wind NNW., 8, in latitude 42° 06' N., longitude 54° 31' W. End on February 1, wind NW. Highest force of wind 10; shifts NNW.-NW.

French S. S. *Rochambeau*:

Gale began on the 30th, wind SSE. Lowest barometer 29.37 inches at midnight on the 30th, wind S., 11, in latitude 49° 05' N., longitude 26° W. End on the 31st, wind WSW. Highest force of wind 12; shifts not given.

American S. S. *Wildwood*:

Gale began on the 29th, wind S. Lowest barometer 29.92 inches at 8 p. m. on the 31st, wind SW., 10, in latitude 39° 15' N., longitude 31° 02' W. End on February 1, wind WNW. Highest force of wind 11; shifts SW.-WNW.